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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,282	03/29/2001	Michael Harper	BS01060	4458

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CANTOR COLBURN LLP
55 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002

EXAMINER

LE, VU

ART UNIT PAPER NUMBER

2613

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/821,282	HARPER, MICHAEL	
	Examiner	Art Unit	
	Vu Le	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/01</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 6, 14 are objected to because of the following informalities:

The term "celemetry" is not understood. The specification fails to elaborate on this term. For art rejection purpose, the examiner will interpret "celemetry" as "telemetry". Appropriate correction/clarification is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grober, US 6,718,130 in view of Nakajima et al, JP 06-191479 (machine translation).

Re claim 1, Grober discloses a buoy for observing and monitoring the surface of a predetermined area of water (figs. 1-2), comprising:

a flotation device (1);

a waterproof imaging device attached to the exterior of the flotation device, the imaging device operable for obtaining continuous real-time images of the surface of the predetermined area of water (5, col. 3, lines 55-58);

one or more communications devices partially or wholly disposed within the flotation device, the one or more communications devices operable for transmitting a

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signal representing the continuous real-time images of the surface of the predetermined area of water to an operator at a remote location (7, 19, col. 3, lines 2-3, 55-58).

Grober does not explicitly disclose "a waterproof computer partially or wholly disposed within the flotation device, the computer operable for storing the continuous real-time images of the surface of the predetermined area of water" as claimed.

Although Grober discloses the camera (5) is used for recording images (col. 1, lines 63-64).

However, the convention of using a waterproof computer disposed within the flotation device, and operable for storing the continuous real-time images of the surface of the predetermined area of water is made well known by Nakajima et al (fig. 1: 1b is buoy waterproof main body, 18 is video camera, 9 is CPU system enclosed in the waterproof main body to serve as central control operations-which is operable to control storing continuous real-time images from the camera 18).

Therefore, taking the combined teaching of Grober and Nakajima et al as a whole, it would have been obvious to incorporate "a waterproof computer partially or wholly disposed within the flotation device, the computer operable for storing the continuous real-time images of the surface of the predetermined area of water" as claimed for the benefit of self-contained and computer-controlled buoy to indicate accurate position and image information out at sea for the surveillance applications.

Re claim 2, the buoy of claim 1, further comprising a gimbal structure attached to the exterior of the flotation device and to the imaging device, the gimbal structure

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operable for allowing the imaging device to remain level in the presence of buoy tilting caused by wind and/or water currents. (See Grober, col. 3, lines 46-54).

Re claim 3, Grober does not explicitly disclose the buoy further comprising a power source partially or wholly disposed within the flotation device, the power source operable for providing power to the imaging device, the computer, and the one or more communications devices as claimed. However, one skilled in the art would have recognized that it is obvious and necessitated to have a power source to power the camera/electronic stabilization operations in Grober. Nevertheless, Nakajima et al teaches such power source (fig. 1: 15, also para. 0023 in "Detailed Description").

Therefore, the combined teaching of Grober and Nakajima et al as a whole would have rendered obvious the power source as claimed for the benefit of providing continuous power to the camera/control operations in a self-contained buoy system.

Re claim 4, the buoy of claim 1, further comprising a plurality of energy collecting/power generating devices attached to the exterior of the flotation device, the plurality of energy collecting/power generating devices operable for maintaining the voltage level of the power source. (See Nakajima, para 0023 in "Detailed Description". The dc power source 15 may be of solar cells).

Re claim 5, the buoy of claim 1, wherein the one or more communications devices further comprise one or more mobile telephones having data transmission capability. (See Grober, col. 3, lines 55-58. The transceiver 7,9 comparatively serve as mobile telephones for data transmission).

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Re claim 6, the buoy of claim 1, wherein the one or more communications devices further comprise one or more telemetry devices. (See Grober, col. 2, lines 42-44, i.e. GPS).

Re claim 7, the buoy of claim 1, wherein the imaging device is disposed within a protective structure. (See Grober, col. 3, lines 55-56).

Re claim 8, the buoy of claim 1, further comprising a tether and a mooring attached to the exterior of the flotation device, the tether and the mooring operable for securing the flotation device in a predetermined location. (See Grober, figs. 1-2: 9,11, col. 3, line 64 – col. 4, line 9).

Re claim 9, the buoy of claim 1, further comprising a controller associated with the imaging device, the controller operable for controlling the orientation of the imaging device relative to the surface of the predetermined area of water. (See Grober, col. 3, lines 24-45).

Claims 10-17 have been analyzed and rejected w/r to claims 1-9.

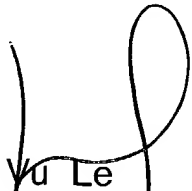
Contact

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu Le whose telephone number is 703-308-6613. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 703-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Vu Le', with a large loop at the end of the line.

Primary Examiner

AU 2613

(703) 308-6613

Vu.Le@uspto.gov